

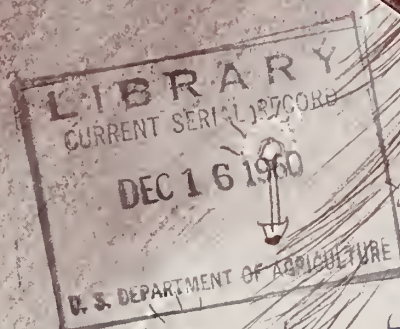
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Reserve
A280.38
Ag 8

DECEMBER 1960

agricultural marketing



Contents

December 1960

The Growing Christmas Tree Industry	3
New 'Ready Market' for South Carolina Grapes	4
Small Producers and Poultry Inspection	6
Seasonal Variations in Farm Food Prices	7
The Dairy Farmer and His Local Market	8
A Quicker Way to Test Raisin Samples	10
Minimum Wages and Marketing Costs in Food Stores	11
Needed: More Livestock Market News	12
The Cost of a Glass of Milk	13
Loading Grocery Trailers with Multiforklift Truck	14
U.S. Becomes Major Almond Exporter	15
Christmas Fruits and Nuts	16
Plentiful for December	16
Canadian Christmas Trees	16
Quality of Export Fruit Studied	16

Cover page

From America's fertile fields and orchards have come an abundance that will make this Christmas an especially merry one. The excitement of the season is caught in the starry expressions in the eyes of our cover girls. They are delighted with the overflowing bowls of fruits and nuts, the bright lights, and the gaily decorated tree. And, for Christmas dinner, they can look forward to even more good things—things like turkey, cranberries, onions, and dates, all of which are in plentiful supply this year.

Reprint material

All articles may be reprinted without permission. Prints of photos and art used in this publication can be obtained from USDA Photo Library, U.S. Department of Agriculture, Washington 25, D.C. Photos used in this issue are identified by the following negative numbers: Page 3, 485361U (left), 463500; p. 4, BN11679 (top), BN11680; p. 5, left to right, BN11681, BN11682, BN11683; p. 6, DN1619; p. 7, BN9761; p. 8, top to bottom, AAA6827W, N37984, N37979; p. 9, top to bottom, N28419, N27484, AAA-7073W; p. 10, BN11684; p. 11, BN11685; p. 12, N32463; p. 15, courtesy California Almond Growers Exchange.

Editor, Milton Hoffman

Associate editor, Jeanne Starr Park

AGRICULTURAL MARKETING is published monthly by the Agricultural Marketing Service, United States Department of Agriculture, Washington 25, D. C. The printing of this publication has been approved by the Bureau of the Budget, March 18, 1959. Yearly subscription rate is \$1.50, domestic; \$2.25, foreign. Single copies are 15 cents each. Subscription orders should be sent to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.



More Christmas trees are moving to market under standards of Department of Agriculture.

These firs, grown on plantation, are ready for Christmas market.



THE GROWING Christmas Tree INDUSTRY

by Charles C. Littleton

SHED A TEAR, if you will, for the snowy scene of yesteryear, when Grandpa and the boys set off for the back forty to cut a home-grown Christmas tree.

More than likely, the back forty is in timber now, or planted to other crops, and today's Grandpa is buying his tree this year just like the rest of us.

A changing agriculture and the increasing pressure of competition in the city marketplace have made Christmas trees a highly specialized business. Today's Christmas tree shipper may be big or little—some firms control thousands of acres and market millions of trees each year. But they're all specialists interested in high-quality trees.

They treat today's typical Christmas tree a little differently than the

one Grandpa cut. It has no lonesome childhood deep in the woods.

More and more, the trees are grown on plantations, or in improved wild stands. The trees are sheared and pruned to improve their appearance, and sprayed against insects, until they're ready for the Christmas ornaments.

And more growers are shipping these improved Christmas trees under the official grade standards set up by the Agricultural Marketing Service.

These grade standards are a marketing tool which works for both the shipper and the dealer who's buying the trees. A Government inspector examines the trees and assigns the proper grade on the basis of the standards. Then, when a distant buyer phones or writes a shipper as to what kind of trees he wants and is willing to pay, the shipper can tell him, "I'll ship you some U.S. Premium trees," or "I'll ship you some U.S. No. 1's."

There's no question then that the

buyer would know what he's getting—and the shipper is in a good bargaining position to take full advantage of the beauty and quality of his trees.

Increased interest in the U.S. Christmas tree grades follows directly from industry interest in better trees.

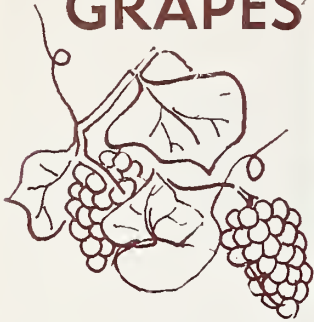
Quality is a key word to tree men because supplies of Christmas trees have been plentiful for several years. Last year, many dealers were overstocked, and the poorer trees were still unsold the day after Christmas.

They don't want that to happen again, and each dealer tries to get the best-quality trees he can. Better production methods provide the trees, and AMS's grade standards help market them to the best advantage. The result? More beautiful trees for our Christmas celebrations.

And you may be ever so nostalgic about Grandpa hauling his home-grown tree out of the woods. But remember, your tree could very well be prettier.

The author is a staff member of the Fruit and Vegetable Division of AMS.

New Ready Market for SOUTH CAROLINA GRAPES



by J. E. Youngblood and Art Susott

THE GRAPE marketing picture is bright in South Carolina.

Growers this year had a "ready market" for their crop—in the newly built \$125,000 processing plant at Spartanburg, S.C.

On August 10, the first truckload of grapes rolled up to the plant, and the pressing of grapes began. By the end of the harvest in mid-September, the new plant had crushed more than 850 tons of Concord grapes. Approximately 150,000 gallons of juice had been obtained, pasteurized, and stored in 5-gallon containers.

Storage was necessary because holding tanks and evaporators had not then been installed. By early December, however, a canning and bottling line was to be added for re-processing the stored juice and pack-

Mr. Youngblood is Director of the South Carolina State Agricultural Marketing Commission, and Mr. Susott is Chief of the Southeast area office of the Marketing Information Division, Agricultural Marketing Service, USDA.

This is exterior view of processing plant built by South Carolina grape growers' association. Last year 850 tons of grapes were crushed; growers aim at 10,000 tons per year.



Extension Marketing Specialist D.C. Hutchins checks grapes arriving at processing plant of The Palmetto Grape Marketing Association.

Conveyor belt lifts grapes from the washing unit and feeds them into stemming machine. Inside plant, grapes are crushed for juice.

Juice, pasteurized and stored in five-gallon containers, awaits installation of canning and bottling machinery this month.

suited to grape production.

While the South Carolina grape crop may never equal the volume in other leading grape States, South Carolinians are intensely proud of their vineyards. Over the years, grapes have been a source of income for many families on small farms.

Since 1951, grape production in the State has been gradually moving upward. Between 1949-58, the annual crop averaged 1,270 tons. Last year it ran close to 1,800 tons, and this year the crop was expected to reach 2,000 tons.

Recently, though, growers had been experiencing some difficulty in marketing their crop. They saw local and nearby markets for fresh grapes becoming more and more saturated.

In 1957, faced with an unmanageable surplus, growers asked marketing specialists of the South Carolina Extension Service for help. These people, in turn, helped the growers develop a plan for interesting 24 processing plants, mainly in the Northeast, in buying the annual crop. Two companies were interested, and of these one indicated it might expand its operations into South Carolina.

This company, of course, wanted to be sure the South Carolina grapes were satisfactory for juice products. So, late in the summer of 1958 some

aging it into consumer-size containers. Products for consumer use will be in the form of canned grape drinks, bottled grape juice and a grape-lemon drink.

Before the next harvest season, a concentrator and cold storage facilities will be added. These will enable the plant to turn out frozen grape concentrate as well as other juice products.

The 850 tons of grapes handled at the new plant this first year are only a starter. Members of the newly organized growers' marketing association which owns the plant are working to increase grape production to 8 or 10 thousand tons annually—the tonnage estimated to be necessary for operating an enlarged plant economically and profitably.

Most South Carolina grapes are grown in the Piedmont area of the State and in the not too far distant Lexington and Chesterfield counties. Horticulturists say the soil and climate in these counties are ideally





130 tons were shipped to the company's plant in New York. Tests showed the southern grapes quite satisfactory, and shortly thereafter the company outlined its proposal for extending its processing operation in South Carolina.

Under this proposal, the grape growers would build and equip a plant, and the company would lease and manage it. The New York firm also would market the products.

Growers would be paid a minimum price, based on sugar content, for each ton of grapes produced under contract and later share in the profits of the operation.

Officials of the company pointed out that a minimum of 2,000 acres of grapes—about double the acreage in South Carolina at that time—would be necessary to operate a processing plant.

At this point, grape growers and others interested in the State's grape industry were called together and a working group was named to look into ways and means to finance the building and equipping of the plant. At Columbia, S.C., they talked with officials of the Columbia Bank for Cooperatives, who agreed to lend them up to 50 percent of the amount needed. To raise the balance, the growers agreed to subscribe to stock

in a growers' marketing association.

This association was chartered as The Palmetto Grape Marketing Association. Jerry Settle of Gramling, S.C., was chosen president, and under his leadership the membership, which has upwards of 1,600 acres in grapes, has passed the 400 mark.

The next move was to find a suitable site for the processing plant—one convenient for the growers yet close to transportation facilities and an adequate water supply.

This time the marketing association turned to the South Carolina State Agricultural Marketing Commission. One of the Commission's current projects, made possible by the Matching Fund Program of the Agricultural Marketing Service for expanding markets for farm products, is to assist in locating processing plants.

The Commission engaged Dr. G.H. Aull, Head of the Department of Economics and Rural Sociology at Clemson College, to make a survey and to recommend a site. Dr. Aull suggested a location near the intersection of Interstate Highways 85 and 26 just west of Spartanburg, and the site committee of the marketing association accepted his recommendation.

Land for the plant was donated by Spartanburg county, and in April

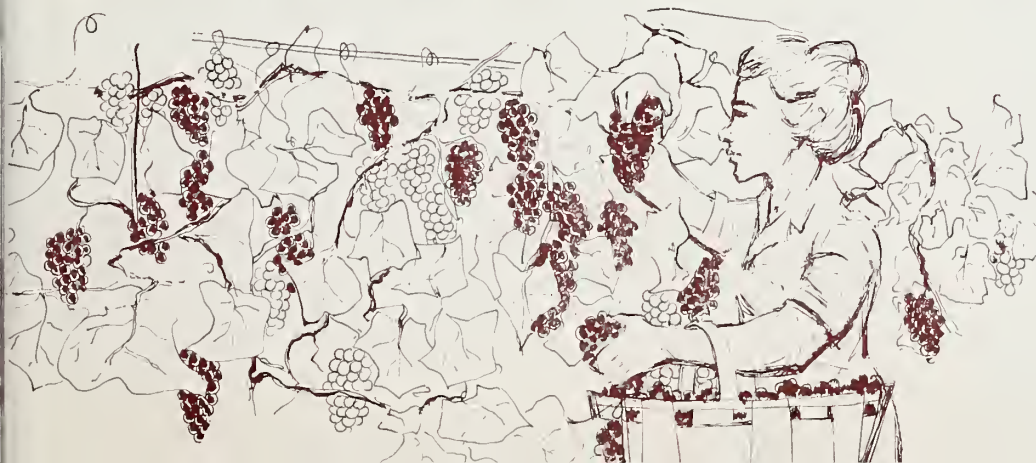
1960 construction was begun.

Originally, plans were to build and equip a plant costing \$250,000. However, it was realized early in 1960 that it would not be possible to have such a plant ready for that year's grape crop. So, the original plans were modified, and by harvest time a new \$125,000 plant stood ready for processing.

As the grapes were crushed, the juice was pasteurized and stored in 5-gallon containers for later canning and bottling. In the next year or two, the plant will be expanded and more processing equipment added. This will bring its value up to the original \$250,000.

President Settle and the grape marketing association are more than pleased with the way things have worked out. However, there's still a lot of work ahead. For one thing, the grape acreage must be increased still more so that when the processing plant is fully expanded and equipped there will be a large enough volume of quality grapes each year to insure economical and profitable operation.

Ask Settle what he thinks about the job ahead and he'll say, "You know, we managed to come a long way the past two years, so I guess we'll be able to make it the rest of the distance."





SMALL PRODUCERS and POULTRY INSPECTION

*How the small-scale operator fits
into scheme of things under the new
Poultry Products Inspection Act.*

by Raymond D. Wenger

LARGE-SCALE poultry enterprises, geared to supply chain stores, supermarkets, and other high-volume retail outlets, have recently overshadowed smaller operators who raise and process poultry for sale direct to consumers.

But the small-scale producer is still filling a big need in "noncommercial" market areas and local trade channels.

And, just like the large-scale processors, he, too, is affected by the new Poultry Products Inspection Act.

Whether or not he is directly subject to the Act depends upon where he sells his poultry—that is, if it crosses State lines.

Even then, he is not required to have a Federal inspector at his plant if he processes only poultry he raises himself and sells it directly to household consumers, restaurants, boarding houses, and hotels.

To maintain eligibility under the "Producer Exemption" provision of the Act, a producer-processor must:

- Process only healthy poultry and slaughter it under sanitary conditions. (This means that he must put only "sound, healthful, and wholesome" poultry products on the market.)

- Mark all shipping containers with his name and address and the statement "Exempted, P.P.I.A. 85-172."

All producer-processors who ship across State lines *must* comply with these regulations—or they can lose their "Producer Exemption" and be subject to legal penalty.

All other small-scale producers who raise and market poultry *should* also comply—for their own best interests.

Last year some 5 billion pounds of poultry passed through the hands of Federal inspectors. This year the amount will be even greater.

If the small operators are to meet the competition of Federally inspected poultry, they must turn out a product of equal quality and wholesomeness.

Grading for quality and inspection for wholesomeness are of special concern at this time.

Improved plant facilities and the use of new slaughtering, processing, and marketing methods—as well as producer grading and inspection—will help producer-processors keep pace with changes in their market and meet requirements for "Producer Exemption."

Staff members of the Agricultural Marketing Service's Poultry Division discuss these topics, along with others of concern to producer-processors, in a new U.S. Department of Agriculture bulletin entitled "Processing and Marketing Farm Poultry."

In the publication, these specialists outline requirements for USDA grades of poultry and tell how producers can grade birds to assure their customers of quality. Illustrations show the difference in external appearance of USDA Grades A, B, and C chicken and turkey carcasses.

The section on inspection tells how to examine poultry for external and internal deformities or conditions which render the birds unfit for food.

The bulletin also covers marketing, plant construction, and methods of killing, eviscerating, chilling, cutting up, canning and smoking, packaging, freezing, and storing.

Copies of Marketing Bulletin No. 7, "Processing and Marketing Farm Poultry," are available free from the Office of Information, U.S. Department of Agriculture, Washington 25, D.C.

The author is Assistant Chief of the Inspection Branch, Poultry Division, AMS.

Seasonal Variations in Farm Food Prices

AMS economists explain why prices of some products fluctuate more than others.

by Hazen F. Gale

AS EVERY smart housewife knows, if you want to save money on your food bill, you look for in-season bargains when plentiful supplies mean low cost foods.

But what the housewife doesn't always know is why the retail price of milk, for example, changes so little from one end of the season to another, while the price of such products as tomatoes changes sharply through the months.

Economists in the Agricultural Marketing Service give us some of the answers.

Though milk is perishable and production is heavier in the spring than in the fall, the consumer sees little change in the retail price for milk. Here's why.

Milk that can't be sold in the fluid market during peak production goes into manufactured dairy products. In diverting some of his production, the farmer helps balance his supply with demand and smooths out the ups and downs of prices. So, the customer sees only a slight drop in prices from the fall peak to the spring low.

Fruits and vegetables, and especially tomatoes, are at the other end of the range with wide swings in retail prices, farm value, and marketing margins. Prices are down in the summer when tomatoes are produced in abundance throughout the country. In the wintertime most of our tomatoes come from Florida, with some imports to supplement the crop. Shorter supplies and longer distances to market mean higher farm prices and marketing costs.

Frying chickens are in the intermediate group with a somewhat more active seasonal swing in farm and

retail prices. Production and farm prices are usually on the rise during the first half of the year and hit their peak in the summer. But at this point, the supply-demand relationship takes a new turn.

Even though production is at a seasonal peak—and the farm value is on the way down—the retail price continues fairly high for two reasons. The retail price of red meat is at its seasonal high at this time and fried chicken is a summertime favorite. Taken together, these facts mean the demand for frying chicken is up during the summer even though supplies are near their peak.

Come autumn, the retail price of chicken begins to follow farm prices to their seasonal low at the end of the year.

Red meat such as Choice grade beef has the same moderate rise and fall in supply and price, though the ups and downs come at different times of the year. Ten or 15 years ago, retail prices for beef during peak marketings in February would drop as much as 8 percent below the yearly average, and would rise to 7 percent above average in August and September when few animals were going to market. Today, the seasonal swing in prices is much smaller, largely because of a more even supply of beef throughout the year.

By and large, farm prices follow a more erratic course throughout the season than either retail prices or marketing margins. For most commodities, changes in retail prices lag behind changes in farm prices. Consequently, seasonal variations in margins tie more closely to the retail price than to the farm value. As a result of the delayed response, retail prices and marketing margins for many products

--continue to rise after farm prices start down, and

--continue to decline when farm prices turn up.

Some retailers use a percentage markup to establish price. This practice increases margins when retail and farm prices increase, but the retail price changes more in dollars per unit than does the farm value.

On the other hand, seasonal changes in the marketing margins for red meats are just the reverse of changes in farm and retail prices. The main reason is the tendency for farm prices to rise and fall faster than retail prices.

Marketing margins are affected by seasonal variations in marketing costs, though not to the same degree with all products. Increased marketings often mean lower unit costs. Even with no change in volume, the marketing costs can vary if, for example, the production areas are farther from the market. Longer distances; greater transportation costs.

Agriculture still lives by the calendar, but research in better storage, handling, and distribution is helping to make our food supply a more reliable affair.

Ten years ago, beef prices during peak February marketing would drop as much as 8 percent below yearly average, and would rise to 7 percent above average in August. Today, seasonal swing is smaller, because of more even supply of beef.



The author is a staff member of the Marketing Economics Research Division, AMS.

The DAIRY FARMER



by Howard C. Feddersen

THE DAIRY FARMER who supplies drinking milk for a city market has been faced in recent years with the increasing problem of maintaining his market.

Time was when "fluid" milk was a local product. Not so today.

Modern techniques of refrigeration, bulk handling, and transportation have made it possible for "Grade A" drinking milk to be shipped many miles without appreciable loss of quality. Distributors are covering ever widening areas.

Production of Grade A milk has increased since World War II in nearly all of the major milk sheds. In addition, many areas that produce large quantities of lower grade milk for manufacturing are potential sources of Grade A milk. These areas include the Upper Midwest, the Ozarks region of southwestern Missouri and northwestern Arkansas, the San Joaquin Valley in California, and the North Cache Valley of Utah together with some other areas in the Rocky

Mountains.

Today, both the dairy farmer and the milk processor and distributor face competition from other areas and regions of the country.

Because it is bulky and perishable, milk has always presented difficult marketing problems. The dairy farmer has sought various ways to deal with them. One of these is a cooperative marketing association through which he bargains collectively with dealers. Another is the classified pricing plan under which he gets a higher price for milk sold for fluid use and another lower price for that going into butter, ice cream, and so forth.

During the early 30's, milk marketing became so chaotic that the plans did not work, and many in the industry asked for Federal regulation to restore stability. The result was the Agricultural Marketing Agreement Act under which the U.S. Department of Agriculture may, on request, issue marketing orders regulating the handling of milk in specific market regions—usually metropolitan areas.

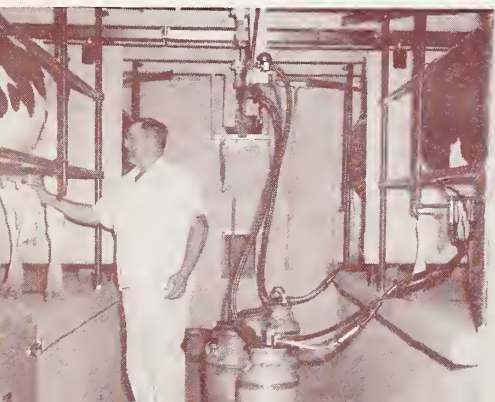
Federal orders require handlers supplying the marketing area to pay producers no less than a specified minimum price.

The orders provided the authority that cooperative agreements lack. The local market administrator, appointed by the Secretary of Agriculture, is authorized to check weights and tests of producer's milk and audit handlers' books and records to verify their reported receipts of milk from producers and payment according to their use of milk in each class. Since the producer's return is affected by both the class prices and the relative amounts sold in each class, it is only through such authority that the order program can be effectively carried out.

The Federal milk marketing order program—administered by the Dairy Division of USDA's Agricultural Marketing Service—does not maintain an artificially high level of price.



Today, as never before, the local dairy farmer faces competition from other areas of country.



The author is Deputy Director of the Dairy Division, Agricultural Marketing Service.

His Local Market

is it guarantee the farmer a market or control production.

It is simply aimed at stabilizing marketing conditions through a price level which moves to bring about a balance between supply and demand. It thus assures consumers of an adequate milk supply.

And though the depression years which started the milk order program are long behind us, the need for the program has grown continuously. Through the years, as the dairy industry changed, the order program has adapted itself to the evolution.

Today, Federal milk marketing orders are in effect in 80 metropolitan areas, including most of the largest cities of the Nation. More than 40 percent of all the milk sold wholesale by farmers is marketed under Federal order terms. In the past year, more than 190,000 dairy farmers sold 44 billion pounds of milk—worth \$1.8 billion to handlers regulated by marketing orders.

And this despite the fact that approval of a large majority—more than two-thirds—of the farmers whose milk will be marketed under the program must approve an order.

Producers, however, do not dictate the terms of an order. They are only given opportunity to approve a complete order drawn up by the USDA. Their action must be in line with the public interest and equitable to consumers, handlers, and producers.

The value of the Federal order program today rests in no small measure on the requirement for uniform minimum pricing of all milk supplied to the local market, regardless of source. This, along with the realistic supply-demand pricing standards of Federal orders, is of considerable aid to both the dairy farmer and the distributor in maintaining local markets.

Federal milk orders cannot be used to prevent movement of milk over distances. Movements of milk from the Midwest and other surplus areas to localities where there is not a suf-

ficient milk supply is certainly to be encouraged.

But, it is wasteful to move milk from one surplus area to another surplus area. It is the responsibility of the Government to make sure that uneconomic movements of milk are not promoted. It does this by setting minimum prices under Federal orders.

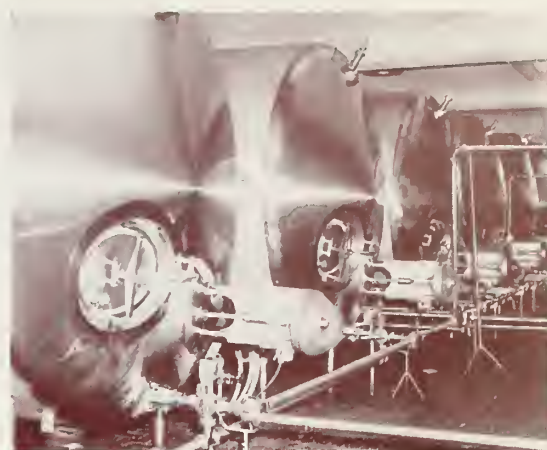
So in following the supply-demand pricing principle today, more than the local market must be taken into consideration. It has become necessary to base milk prices in local markets by beginning with the prevailing prices paid for manufacturing milk in the areas of large production.

The higher prices paid for fluid milk often appear attractive to producers of large quantities of manufacturing milk. Technological advances have made it possible for many of these producers, with only slight price inducement, to shift to the production of Grade A milk—and many are shifting. Thus, only the cost of transportation really stands between these large reservoirs of milk and many local milk markets.

As a result, in most regulated markets, Class I (fluid) prices are now determined by the prevailing price for milk in areas of large production, plus the cost of transporting it from such areas to the local market.

The traditional price advantage that nearness to market has given producers of fluid milk is thus limited to differences in transportation cost. It is only through appropriate price alignments between markets and between regions that the dairy farmer can be assured, under the Federal order program, against the loss of his market to dairy farmers in other areas.

The prompt recognition that Federal milk orders are given today to price changes and inevitable price relationships between markets is vital planning for prosperity in milk production tomorrow.



Each of these tanks holds 2,000 gallons of fluid milk. Mechanism at front provides for agitation.

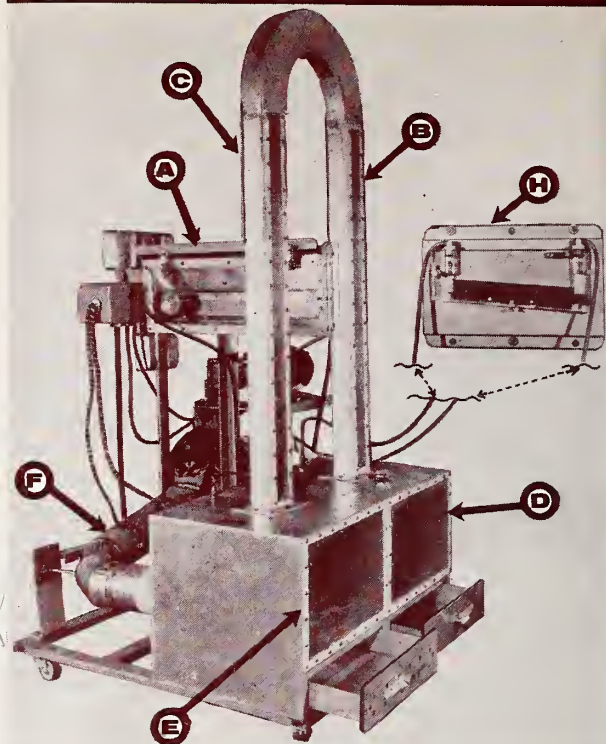
In most regulated markets, fluid milk prices are determined by prevailing price in areas of large production plus the extra cost of transportation.



Federal orders seek supply and demand balance.



This is the automatic raisin sorting machine tested by AMS researchers. Its parts consist of: A, chamber containing conveyor belt onto which raisins are placed; B, vertical shaft through which air shoots upward through the raisins; C, continuation of shaft B, leading into deposit box for immature raisins and vine trash; D, chamber into which the heavier, sugar-filled raisins drop; E, chamber for immature raisins and vine trash; F, air return pipe for box E; G (not shown), blower with direct motor drive; and H, micromanometer to measure the difference between air pressure in two chambers.



A QUICKER WAY TO TEST RAISIN SAMPLES

by A.P. Sidwell and Calvin Golumbic

IMMATURE grapes make "skinny" raisins—and who wants them?

Nobody.

That's why they are removed by packers from deliveries made by raisin producers before the raisins are processed and packed for sale.

A sample with too many "skinnies" won't meet the test for acceptance under a Federal marketing order.

At present, the Processed Products Inspection Branch of the Fruit and Vegetable Division, Agricultural Marketing Service, evaluates the maturity quality of raisins at the time they are delivered to the processor's plant. This is done by sight and by feel. (The "skinny" raisins are spotted by eye or detected by the time-honored "squeeze test.")

This hand-sorting takes a lot of time.

To speed things up, AMS scientists have tested a machine that can separate the skinny (lightweight) raisins in a sample faster and more accurately than can be done by hand.

A carefully controlled stream of air blows the lightweight, immature raisins and vine trash into a special container. The heavier, meatier raisins sink into another container.

By the use of this machine, an inspector can quickly determine if a grower's load of raisins meets the regulations of the Federal marketing order for the maturity quality factor.

Tests of the newly developed airstream sorting machine were made with raisins in their natural condition as they were delivered by the grower to the packer. The separation consisted of removing the substandard raisins from representative samples taken from grower deliveries.

A series of 176 samples was sorted—both by hand and by machine. Although individual sample results from the airstream sorter varied slightly from the hand method, the average of the results were very close together, indicating that the new machine method was capable of doing the job accurately.

And it was much faster. The machine can sort as many raisins in 10 minutes as a hand-sorting technician can in an hour.

Several questions, however, remained unanswered.

Could other machines be adjusted to give the same results?

Would there be a difference in the sorting if a different operator ran the machine?

To answer these questions, re-

searchers built a second sorting machine. This they checked against the first.

Properly adjusted, the two mechanical sorters produced equivalent results—and were much more precise than the hand method. There was no significant difference in the results found between the two trained operators.

Everything considered, the researchers are well pleased with the new machine. They point out that mechanical airstream sorters—

- Provide precise separations of substandard maturity raisins and vine trash from standard or better maturity quality raisins,
- Are consistent in their results,
- Permit larger samples to be run,
- Are much faster than presently used hand methods.

To separate samples of raisins into Grade C, B, and A maturity classifications, the machine would have to be set differently. Preliminary work on sorting raisins into the higher maturity classifications is under way.

A report containing details of the research is now being printed. For a free copy, write to the Office of Information, USDA, Washington 25, D.C.

Both authors are in the Market Quality Research Division of the Agricultural Marketing Service.

Minimum Wages and Marketing Costs IN FOOD STORES IN NEW YORK STATE

by Robert F. Risley and
Imogene Bright

WHAT HAPPENS to marketing costs at food stores when wages are fixed at higher legal minimums by new wage orders?

Your first guess might be that the higher base would immediately add to costs of food marketing, right across the board.

But a recent study in New York State by the Agricultural Marketing Service indicates this isn't always the case.

In the first place, the general wage level already existing had a lot to do with the matter. In stores where most workers were already being paid wages above the newly set minimum, the total cost effect was slight. This was also true in many cases where adjustments in work time were made in the stores.

In 1957 the Legislature in New York State raised minimum wages for employees in the retail trades industry from 70 cents to \$1 an hour for stores located in cities of 10,000 or more people. The minimum for communities with less than 10,000 people was raised from 65 to 90 cents. And in January 1958 the minimum

in the smaller communities was raised to \$1. The wage order also called for overtime pay for anything over 40 hours, instead of the previous 45 hours.

What happened to labor costs, store margins, and selected operating methods when these new minimums went into effect? And especially, what was the effect on stores in smaller cities?

To get the answers, researchers studied the operations of 50 grocery stores in the State. Some 28 of these stores were in the smaller cities; 22 were in the larger. The study period ran from 4 months before the second wage order to 10 months after it. Since the larger communities were not affected by the second wage order, stores in these cities were included in the study largely for purposes of comparison.

Here are the general findings:

Half of the stores in the smaller cities were not affected by the wage change, simply because their wage scale was equal to or more than the new legal minimum. Of the 14 stores that were affected, only 8 had larger payrolls after the 1958 wage order went into effect. The average hourly labor cost for the affected stores rose from \$1.08 to \$1.14 after the order. This increase was only 3.7 percent,

though the change stipulated by the order represented an increase of about 11 percent in the legal minimum.

Over the entire period, labor costs (shown as a percentage of sales) tended downward both in the affected stores and in stores in the larger communities. This ratio was slightly different for stores in the under-10,000 towns which were not affected by the wage order. Their labor costs as a percentage of sales rose during the first part of the survey period but returned to their original level before the study was over. Sales declined in all groups of stores during much of the survey period.

Average weekly man-hours also declined in all store categories. In the smaller communities, stores affected by the order showed a decline of 14 percent. Man-hours in unaffected stores in these same cities dropped 7 percent. And, stores in the larger communities showed a drop of 9 percent during the period.

Checking some 30 items in the store, the marketing researchers noticed no change in margins as a result of the wage order. In stores affected by the order, the average margin did increase by some 4 percent between August 1957 and September 1958, the period of the study. However, margins for stores in the big cities rose 6 percent for the same items. And they rose 9 percent in unaffected stores in the smaller communities.

According to the marketing researchers, only a few stores economized on the use of labor as a result of the wage order. Some stores eliminated delivery services, changed methods for handling their stock, or curtailed employee fringe benefits.

So the effect of minimum wage legislation on food stores depends on many things. Under some circumstances it can add to food marketing costs. But not always.

Robert F. Risley is assistant dean and professor of industrial relations, Cornell University. Imogene Bright is an agricultural economist in the Marketing Economics Research Division of AMS.





What USDA is doing about it

NEEDED: MORE LIVESTOCK MARKET NEWS

by Roy H. Rockenbach

TODAY, livestock producers and feeders—faced with mounting production costs and narrowing margins of profit—need to do an especially good job of marketing. It can spell the difference between profit and loss.

Yet, it's not easy to decide when, where, and at what price to sell livestock in order to get the best returns. The increasing number of local auction markets and the trend toward more direct sales have made the decision harder than ever.

What is needed is more market information—on prices, supplies, and demand—on local as well as terminal sales.

USDA's Livestock Market News Service (a branch of the Livestock Division, Agricultural Marketing Service) is doing its best to give this information to the stockmen. However, the Federal service has neither the funds nor the justification for covering the multiplicity of local markets and local transactions.

The answer, at least as far as the auction sales are concerned, seems to lie in a Federal-State cooperative effort.

In the Southeast, for example, a highly successful system of market

news reporting has been worked out. Alabama, Florida, Georgia, and Kentucky, each employ a team of reporters to work with and under the technical supervision of a Federal market reporter.

These State reporters, trained in the USDA livestock grades and reporting techniques, cover many local auction markets within the State and make their information available to local news media immediately after each sale. The USDA reporter correlates and summarizes these reports, then sends them out for State-wide and national distribution.

A similar arrangement was started in Texas last October, and a number of other States have shown interest in the idea.

In Illinois, a pilot project scheduled to run through June 1961 seeks to obtain Statewide coverage of livestock marketing regardless of the marketing method. (This, of course, does not include Chicago or National Stockyards, Ill., where full-time USDA reporters are on the job.)

In this project, as in the southeastern auction market reporting, a Federal reporter heads up a team of State reporters. These men cover direct marketing at the farm, feedlot, and packer buying station as well as auction sales.

USDA has reported direct live-

stock sales in several areas of the country for many years. But these reports still do not fill the needs of farmers in all areas.

These producers and feeders, however, have in recent years made increasing use of reports on wholesale meat transactions. Wholesale meat prices can be related to prices received for livestock, and information on meat supplies and clearance can serve as a guide to appropriate times for marketing.

In the past few years, reports on carlot meat sales were inaugurated in Chicago, Denver, Philadelphia, New York, and Omaha. Farmers, buyers, and meat packers found these reports so useful that many requested extended coverage of the carlot meat trade.

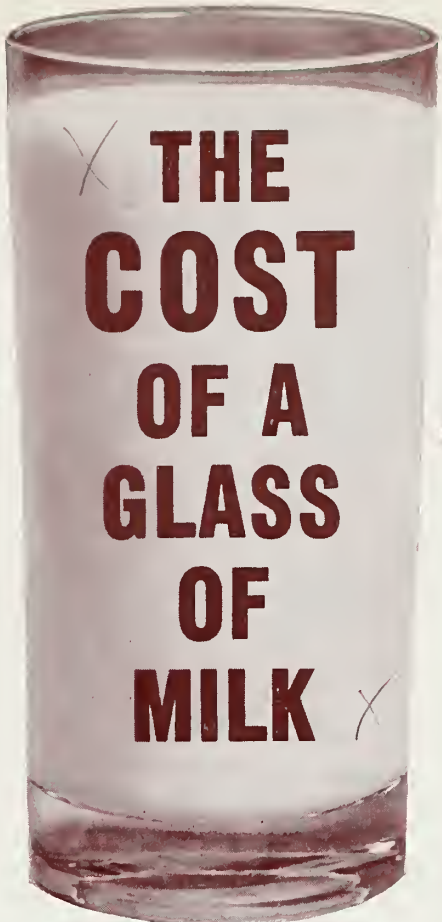
Consequently, this past April USDA began a research project, scheduled to run through June 1961, to test the feasibility and usefulness of a report on carlot meat sales at major slaughtering centers in the Midwest.

A trial report is now being issued twice weekly. It summarizes carlot prices received by packers in Iowa, southwestern Illinois, Kansas, Minnesota, Missouri, Nebraska, and South Dakota. In addition to closing prices on various weights and grades of beef, lamb, and pork, the report gives information on price trends, supplies, demand, and clearance.

One of the most valuable aspects of this report is the fact that it gives the very latest information—some of it on sales made for delivery a week later. Too, the sales covered are extensive enough to have national significance; they represent approximately 25 percent of the total meat production under Federal inspection.

Through efforts such as these, as well as its complete coverage of the terminal markets which continue to form an important market outlet for livestock, USDA is attempting to provide the livestock industry with as much information as is practical and necessary for orderly and efficient marketing.

The author is Chief of the Market News Branch, Livestock Division, AMS.



THE COST OF A GLASS OF MILK

by D. D. MacPherson

WHAT makes up the price of a glass of milk bought at a restaurant, cafeteria, or snack bar?

Just about everything, say Agricultural Marketing Service economists, including the kind of service you get, the season of the year, and the weather outside.

Marketing researchers made a survey of milk costs in eight employee eating places—in one office building—during a two-week period in January 1959.

They found the milk itself cost the cafeteria about 7 cents a glass, delivered.

Labor costs in the cafeteria added another 3 cents. Some of this was the direct cost of preparing and displaying the milk. Part of it was the cost of indirect labor—the work of cashiers, bookkeepers, busboys, waitresses, supervisors, and managers.

The cost of a clean glass is something less than a cent. That's the amount the economists assign to a single serving of milk.

Rent, utilities, and taxes are absorbed into these main cost components. For instance, the cost of providing the clean glass includes not only labor, but also the cost of water, steam, electricity, and cleaning compounds.

Since these eating places were operated primarily for the benefit of

the workers in the office building, there were no advertising costs.

But a few other items still went into the milk's cost. There's a minute charge for silverware, tray, and napkin. You might point out that a spoon isn't used with a glass of milk, but chances are the customer took one as he went through the line. So it's totaled in with the rest. Altogether, the cost of these direct supplies amounts to .04 cent.

Indirect supplies for a glass of milk are a little more expensive; they add up to 0.19 cent. But when you look at the list, it's easy to see why. There are supplies for maintenance and cleaning, refrigeration, and uniforms for the kitchen and serving crews.

Finally, you have to figure depreciation. That glass won't last forever, and it has to be replaced. The cost—.07 cent per serving.

When all of the charges are totaled, a glass of milk costs something

over 11 cents. Now add to this a half cent for the net profit, and the cashier at the end of the cafeteria line collects 12 cents for a glass of milk.

Marketing researchers can, and do, make the cost hunt more complicated than this fairly simple picture. They point out that milk also may be bought in a half-pint carton. Then, even though the cost of the milk is the same, every other cost changes. Labor costs for a carton are nearly a cent less (no glass to wash). The charge for the container is different, too. Instead of a spoon, you have the cost of two straws. And if it's a pint, instead of a half-pint, the costs are again different.

Just as easily, the cost of milk can be changed by buying it at the snack bar, where labor costs are at a minimum. Or, the bill can go up if milk is ordered in a dining room where waitresses make life pleasanter.

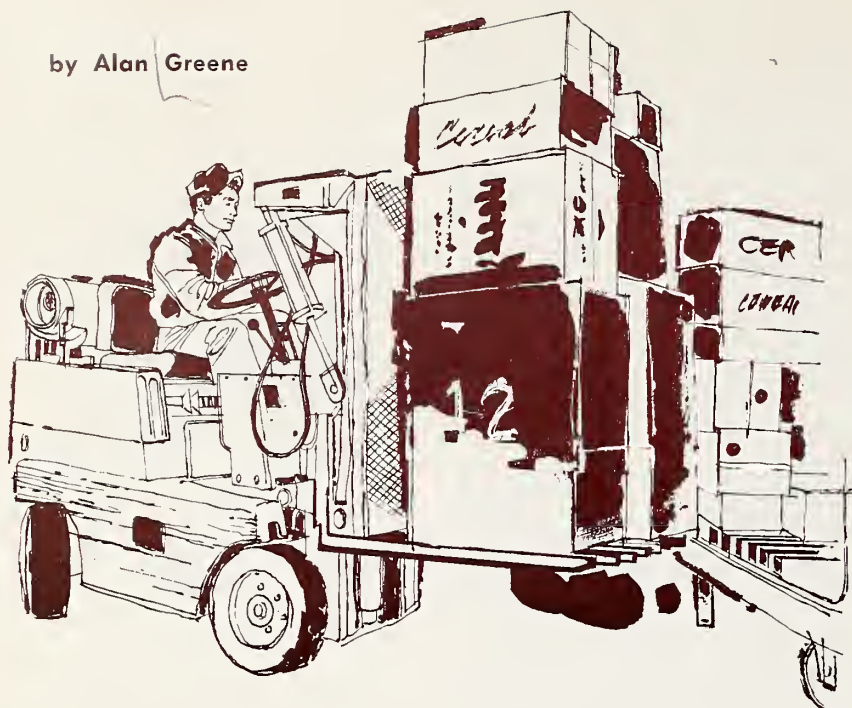
Add to these variations the calendar and the weather. They can change the costs, too. More people eat out of the building in good weather than when it's cold or wet. Fewer customers mean higher unit costs.

But despite these many, varying factors, the cost of milk at the snack bar, cafeteria, or dining room will remain about the same. It isn't worth the effort to adjust prices to every fraction of a cent of cost.

So most of the time, the marketing costs are left to average themselves out—and everyone is much happier.

The author is an agricultural economist in the Marketing Economics Research Division of AMS.

by Alan Greene



Loading Grocery Trailers with the **MULTIFORKLIFT TRUCK**

PALLET LOADING of grocery trailers may save the warehouse operator time, but it doesn't necessarily save him money.

AMS researchers show it's cheaper to move food products from the warehouse to retail food displays with multiforklift trucks — about \$267 cheaper per 100,000 cases.

That's because there's a lot more to the grocery handling operation than loading and unloading. And it's in these other areas that much of the money can be saved. With the multiforklift method—order selection and checking in the warehouse, transportation, and store receiving are all made easier and more economical.

AMS researchers tested the multiforklift (palletless) method in a grocery warehouse shipping 100,000 cases a week. Deliveries were an

average of 30 miles from the warehouse.

The firm was considering changing from handstacking grocery cases in trailers to pallet loading. Research specialists suggested they test both the pallet and multiforklift loading methods before finally making a decision.

This is how the pallet loading operation worked for this company:

Handling empty pallets was time-consuming, especially for the order selectors.

Checkers complained that too much time was required to locate cases that were buried in the center of the pallet loads.

Order selectors were slowed down, because it took more time to arrange cases on the pallets.

Truck capacity was greatly reduced. A 35-foot trailer which held 1,200 cases per handstacked load now averaged only 860 cases with the load

on pallets and partially topped off. (Less capacity, of course, increases transportation costs.)

Truck loading time was improved significantly—as expected.

Unloading time was more than cut in half BUT palletized cases packed in the stores' backrooms were mixed and this made stocking difficult. (It costs less to stock grocery cases when handled on 4- or 6-wheel stocking trucks than on pallets.)

Obviously, the pallet system had more drawbacks than advantages; namely, high transportation, order selection, and case checking costs.

The multiforklift loading system, on the other hand, did not have these particular disadvantages. It combined the efficiencies of handstacking with the efficiencies of pallet loading and allowed lower transportation costs through better utilization of trailer space.

With multiforklift trucks, the warehouseman benefited in these other ways:

- + Order fillers weren't slowed down.
- + The dock was no longer congested.

- + Less manpower was required for order checking.

- + Truck-trailers weren't tied up so long.

- + Greater productivity made dock supervision and scheduling easier.

There were, however, some disadvantages:

- The multiforklift method allowed 9 percent less trailer capacity than handstacking but 28 percent more than palletizing.

- Merchandise in the warehouse had to be arranged to permit "solid" cases to be selected for the base of the load. (This also is a requirement for handstacked loads.)

When everything was added up, the grocery firm decided against pallet loading. Instead, it switched to the multiforklift method of handling groceries. Pallet loading is used only for shipments to stores specifically designed to receive merchandise on pallets.

The author is an industrial engineer in the Minneapolis, Minn., field office of the Wholesaling and Retailing Research Branch, Transportation and Facilities Research Division of AMS.

U.S. Becomes Major Almond Exporter

by Joseph Genske

IN THE PAST 7 years, the American almond industry has changed the United States from primarily an almond importing Nation to one of the world's leading almond exporters.

This has come as a result of a general upswing in U.S. almond production together with an intensive marketing program which stresses high quality and uniformity of product.

Almond growers have, for years, operated under a Federal marketing agreement and order program administered by the Agricultural Marketing Service. Under this program, almonds not needed to supply the domestic market are set aside for marketing in noncompetitive channels.

The export trade promised to be the most profitable outlet for these "set-aside" nuts, even though sales would have to be made at the world price level, which is usually lower than that in the United States.

Probably the biggest barriers in the first few years of this effort were the "dollar restrictions" imposed by dollar-short countries against the import of almonds and other non-essential items.

As economic conditions improved, this problem eased up and restrictions were liberalized. Growers still, however, had to fight the staunch sales resistance of foreign buyers.

Europeans were used to the flavor and other characteristics of Mediterranean almonds. They weren't about to change to something different—without a good reason.

U.S. almond growers gave them the reasons. Our almonds, for one thing, generally grow larger than Mediterranean almonds. This factor alone opened up certain special markets where customers wanted larger nuts.

The author is Chief of the Specialty Crops Branch, Fruit and Vegetable Division, AMS.

American growers also stressed quality and uniformity of size and shape. Our almonds were cleaner and reliably graded. And they were separated by varieties—which the Europeans couldn't match because in Europe the varieties are all grown together. The quality and uniformity of American almonds especially appealed to large-scale almond users.

It wasn't long before European buyers were even willing to pay slightly more than the going world price for American almonds.

Export statistics tell the dramatic story of acceptance overseas. Before 1951, U.S. almond exports amounted to only a few thousand pounds a year. Between 1955-59, we shipped an average of 10 million pounds a year overseas.

Even though we have become a major almond exporter, we still import some nuts for specialized uses. We also import in years when our domestic crop is short.

Take the years 1958 and 1959. In 1958, our domestic crop was in short

supply, and Americans brought in almost 13 million pounds of shelled almonds from abroad. But, in 1959, with a record-breaking crop at home, only 2 million pounds were imported.

The year 1959, in fact, brought the American almond industry its most severe test. Both the U.S. and Mediterranean area harvested record-large crops of almonds.

Under the Federal marketing order, growers set aside about 21 million pounds of the shelled crop for sale overseas—about 50 percent more than we'd ever sold overseas before. In spite of stiff competition, all of these nuts were sold.

The American almond industry has worked hard to develop its export markets. It has maintained a high standard of quality and sold its almonds on the strength of a good reputation. The effort has paid off in sales.

And, it has moved the United States in just 7 years to a position as one of the biggest almond exporters in the world.

Almonds get careful attention before they are shipped. Here, workers in a California plant sort almonds to remove any excessive number of doubles, foreign matter, or defects such as insect injury.



OFFICIAL BUSINESS

The Changing Market

Christmas Fruits and Nuts

Fruit and nut bowls will be well filled this Christmas, and turkeys will be brightened with generous amounts of cranberries, according to USDA's Crop Reporting Board.

Massachusetts, our leading cranberry producer, had an exceptionally favorable season. Wisconsin, New Jersey, Washington, and Oregon also grew above average crops. So the country's cranberry production set a new record.

The Nation's 1960 nut bowl contains the same tonnage as it did last year. Although California almonds are down from their record-breaking crop of 1959, they are still in good supply.

The supply of filberts also is bountiful, even though below last year's large crop. Nearly all of the Nation's filberts come from Oregon.

English or Persian walnuts, grown in California and Oregon, are more plentiful this year than last. The pecan crop in the South was spotty, but on the whole production was above last year.

There will be plenty of brightly colored, good-size apples for the holidays although the commercial crop in 35 States is slightly below average. Some of the Rocky Mountain States were hit hard by spring frosts, but elsewhere the season was generally favorable.

The crop of winter pears in the Pacific Coast States also is below average.

California's navel oranges set light, and Hurricane Donna blew off

part of Florida's early and mid-season oranges. Even so, there will be no shortages of these for Christmas stockings.

Plentiful for December

Broiler-fryers and cranberries, just the thing for a December Sunday dinner, are being featured on this month's Plentiful Foods List put out by the U.S. Department of Agriculture.

Also on the list are onions, dates, peanuts and peanut products, vegetable fats and oils, and, in some areas, pea beans.

Canadian Christmas Trees

Rail shipments of Canadian Christmas trees into the U.S. will be reported this season for the first time, according to the U.S. Department of Agriculture.

Reports of Canadian rail shipments, together with the reports inaugurated last year of tree arrivals in 16 major cities, will give the Christmas tree industry more complete marketing information.

The new report has come at the request of domestic tree producers.

Each year, about 12 million Christmas trees are shipped into this country from Canada—most of them by rail. Canadian imports now will be reported by rail carriers at principal points of entry: Mattawamkeag, Van Buren, and Vanceboro, Me.; St. Albans, Vt.; Niagara Falls, Rouses Point, Block Rock, and Suspension Bridge, N.Y.; Port Huron, Mich.;

Noyes, Minn.; and Portal, N.D.

Canadian rail shipments of Christmas trees will be shown at the end of the daily carlot fruit and vegetable shipment reports issued by offices of the Fruit and Vegetable Market New Service, AMS.

Quality of Export Fruit Studied

A team of marketing experts from the Agricultural Marketing Service, USDA, will leave for London shortly after the first of the year to study the quality of U.S. fruit exports.

The team of four inspection and standardization specialists will remain overseas about three months—through the season when U.S. exports are at their peak.

Their job will be to examine the quality and condition of U.S. fresh, canned, and dried fruit exports as offered in overseas markets. And compare them with exports from competing countries.

The project—designed as a means of expanding markets for U.S. produce—is being conducted jointly by the Fruit and Vegetable Divisions of AMS and FAS.

Going to England are: H.L. Harrington, assistant district supervisor for the Eastern District, and E.R. Pheil, assistant head of the Inspection Service of the Fruit and Vegetable Division, who will examine fresh products; and E.R. Thompson, standardization specialist from the Washington office, and Robert C. Gross, assistant-in-charge at Fresno, Calif., who will examine processed fruit products.



